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for Drugs and Drug Addiction

EU4MD SPECIAL REPORT

Methamphetamine developments in South Asia: the situation in Iran and the implications for the EU and its neighbours

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Since 2019, the EMCDDA has enhanced cooperation with the European Neighbourhood Policy partners ([1]) within the framework of the EU4Monitoring Drugs (EU4MD) project funded by the European Union. The project supports national and regional readiness to identify and respond to drug-related security and health threats.

EU4MD

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Introduction

Iran is a key transhipment point for illicit drugs along the Balkan and Southern trafficking routes. As a result of the large flow of drugs through the country, combined with widespread socioeconomic insecurity due to decades of sanctions and domestic political factors, Iran reports levels of substance dependence that are very high by global standards. Iranian Drug Control Headquarters (DCHQ) reported that in 2019, an estimated 2.8 million Iranians (5.4 % of the adult population aged 15-65) were living with substance use disorders (Mashregh, 2019b). This included an estimated 225 000 regular methamphetamine users, a reduction from the estimated 400 000 regular users in 2015 (Ghiabi, 2019; Mashregh, 2020b). It should be noted that estimating community levels of dependent or regular drug use is methodologically and practically challenging so the precision of estimates in this area should be viewed with caution. Since mid-2019, Iranian public officials have reported that methamphetamine use has been increasing due to the influx of cheap Afghan methamphetamine and a simultaneous rise in the prices of other drugs (Shahrar, 2020b; SNN, 2019; Tabnak, 2019; YJC, 2020c) ([2]).

In the Iranian calendar year 1398 (March 2019 to March 2020), approximately 950 tonnes of drugs was seized in Iran, an increase of 20 % on the previous year (Tasnim, 2020c). Some 80 % of the total quantity of drugs seized was opium, totalling 761 tonnes and representing a 22 % increase on the previous year. Although methamphetamine, known locally as '*shisheh*' (meaning 'glass' in Persian), represented only 1.8 % of all seizures, 17 tonnes of the drug were seized, which was a considerable increase (208 %) on the previous year (see Table 1). There are now regular reports in the Iranian media featuring statements by authorities claiming that methamphetamine trafficking from Afghanistan is increasing, with traffickers appearing to use pre-existing opiate trafficking networks along the Balkan and Southern routes. In November 2020, the head of the Anti-Narcotics Police announced that between March and November 2020, Iran had seized 10 tonnes of methamphetamine, 9 tonnes of which were reported to have been trafficked from Afghanistan (Babaei, 2020).

This report builds on the study published by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) on the Afghan methamphetamine trade (EMCDDA, 2020) and addresses the threats posed by Iran's potential emergence as a transhipment point for Afghan *shisheh*, as suggested by a reported increase in methamphetamine seizures originating from Iran and bound for countries in Southeast Asia and Oceania (e.g. Al-Mulla, 2020; Assegaf, 2020; Cormack, 2020). This report is based on interviews with Iranian drug treatment practitioners, law enforcement officers, United Nations (UN) officials and key informants involved in drug supply, in combination with an analysis of more than 70 Iranian newspaper articles and several Turkish, Kurdish and Australian news articles that outline the scale of methamphetamine trafficking from Iran (e.g. AFP, 2018; Merkezi, 2020; Sherwani, 2020b).

([2]) Also noted in interviews conducted in 2020 with Iranian drug users, treatment experts and UN officials.

TABLE 1
Drug seizures in Iran, March 2019 to March 2020 (based on official DCHQ statements)

Drug types	Tonnes	Percentage of all drugs seized	Percentage change from previous year
Opium	761	80.1 %	+22 %
Cannabis	89	9.4 %	−11 %
Morphine	25	2.6 %	+7 %
Heroin	22	2.3 %	−6 %
Methamphetamine	17	1.8 %	+208 %
Other drugs (including opium syrup) ([1])	36	3.8 %	+139 %
Total	950.4	100 %	+20 %

([1]) Opium syrup, known as '*shireh*', is a refined opium product made by boiling a combination of opium with the residue of smoked opium (known as '*sukhteh*') (Malekzadeh et al., 2013).

Drug trafficking in Iran

Cross-border smuggling of licit and illicit goods and resources is a protracted issue facing the Iranian state due to decades of international isolation (Farzanegan, 2009). The government's Anti-Smuggling Headquarters estimated the value of smuggling at USD 13.1 billion between March 2017 and March 2018 (the Iranian calendar year 1397) (Financial Tribune, 2020b). The Iranian parliament's own report on smuggling, which was presented at a parliamentary meeting on 12 May 2020, estimated the value of smuggled goods and foreign currency in the same time period at between USD 21.5 billion and USD 25.5 billion, according to the press (Radio Farda, 2020a).

Iran plays a pivotal role in two important drug trafficking routes: the Balkan and Southern routes. In 2009, the United States Department of State estimated that 40 % of all opium produced in Afghanistan entered or transited through Iran (USDoS, 2009). Using data reported to the UN between 2009 and 2012, the UN Office on Drugs and Crime (UNODC) estimated the total monetary value of illicit opiates trafficked along the Balkan route at USD 28 billion a year, with gross profits made by traffickers in Iran estimated at USD 7.5 billion, or 27 % of the total monetary value of opiates trafficked along this route (UNODC, 2015a). Iran consistently tops the world opium, heroin and morphine seizure tables, representing roughly 91 % of global opium seizures (644 out of 704 tonnes) and 33 % of global morphine and heroin seizures (46 out of 139 tonnes) in 2018 (UNODC, 2020).

Drug trafficking has had a significant impact on the Iranian criminal justice system. While figures are disputed, it has been suggested that that 38 % of all prisoners (about 80 180 out of 211 000) are incarcerated for drug-related offences (Radio Farda, 2020b). It is reported that between March 2019 and March 2020, law enforcement bodies arrested 224 270 drug traffickers/dealers (Radio Zamaneh, 2020), and between March and May 2020 a further 64 827 individuals were arrested for

drug-supply offences (Tasnim, 2020c). To stem the flow of drugs, authorities have focused on preventing their entry through Iran's eastern border with Afghanistan and Pakistan. Among other measures, authorities constructed 2009 km of embankments, barbed wire and canals, mostly between 2007 and 2017 along the eastern border (DCHQ, 2020). This focus on the eastern border reflects the large amount of seizures taking place there, representing roughly 76 % of all drug seizures between March 2019 and March 2020 (Shahrar, 2020a). To illustrate the scale of drug trafficking across Iran, in just one week in May 2020, Iranian police reportedly seized more than 13 tonnes of drugs and arrested 3 056 individuals for trafficking/supply offences (Tasnim, 2020a). The majority of the drugs seized were opium (more than 10 tonnes), but also included more than 43 kg of methamphetamine (Tasnim, 2020a).

Following the withdrawal of the United States from the Joint Comprehensive Plan of Action, often referred to as the 'Iran nuclear deal', and the re-imposition of sanctions in 2018, there has been a significant decline in the value of Iran's currency, and the country's economy is reported to be increasingly dependent on revenue generated through informal and illicit flows of goods and resources (GIATOC, 2020b; Westcott and Ismaeli, 2019). Research suggests that Iran's western border with the Kurdistan Region of Iraq (KRI) has become increasingly porous in recent years, with a large number of Kurdish couriers carrying legal and illegal goods across the border into Iran and returning with illicit drugs, fuel and Iranian goods (Westcott and Ismaeli, 2019). Given the reliance of the Iranian economy on cross-border smuggling and the reported transformative impact of smuggling on ethnic minorities in Iranian borderlands, it is likely that the country will continue to face challenges in its efforts to address the flow of drugs across its international borders.

Changes in methamphetamine production in Iran

Over the past decade, Iran is considered to have been an important source country of methamphetamine for domestic consumption and trafficking to external markets (UNODC, 2019). While Iranian authorities claim that methamphetamine production started around 2008, when four illicit production facilities were detected in the country (UNODC, 2013), further research, including interviews with law enforcement, methamphetamine producers ('cooks') and UN officials, suggests that production is likely to have started a few years earlier, around 2004/2005. It is reported that in the early days, Iranian 'cooks' predominantly used over-the-counter (OTC) medicines containing pseudoephedrine, in addition to pseudoephedrine diverted from the pharmaceutical industry. A study of 50 samples of crystalline methamphetamine seized by the Iranian Anti-Narcotics Police in 2010 found that 'all of the methamphetamine samples studied … showed evidence which pointed to the use of pseudoephedrine as the starting material' (Khajeamiri et al., 2012). After 2005, methamphetamine production and use appear to have rapidly escalated, reaching a peak in early to mid-2010. Iranian authorities now report, however, that methamphetamine is no longer produced on any significant scale domestically, but rather is imported from neighbouring countries (predominantly Afghanistan) for the Iranian market (YJC, 2020b).

Interviews conducted with UNODC officials in Tehran suggest that 111 illicit methamphetamine production facilities were dismantled in Iran in 2019 ([3]). It appears that methamphetamine facilities are still operational in Iran, although there is also a steady decline in the reported number dismantled by Iranian authorities since 2013 (UNODC, 2017b) (see Table 2). This development is thought to reflect difficulties in accessing precursors, the increased regulation of medicines containing ephedrine and pseudoephedrine and the declining value of the Iranian rial (IRR). Overall, it appears that Iranian producers now seem to be more commonly involved in final-stage processing of Afghan liquid methamphetamine into the crystalline form, or using Afghan-origin ephedrine, possibly synthesised from ephedra (EMCDDA, 2020), to produce methamphetamine for external markets (Alef, 2019; Tabnak, 2019).

Historically, methamphetamine 'cooks' are thought to have obtained the precursors necessary for production by sending drug users to pharmacies to buy large quantities of pseudoephedrine-containing medicines ([4]). However, interviews with methamphetamine producers and law enforcement officials indicated that various regulations enacted after 2010 in relation to OTC medicines containing pseudoephedrine, including changing the chemical composition of these drugs to prevent the extraction of pseudoephedrine (Tabnak, 2019), have complicated and raised the costs of methamphetamine production. As a result of regulations, producers started sourcing pseudoephedrine from the pharmaceutical industry. In 2010, Iran ranked fourth globally for licit imports of pseudoephedrine (UNODC, 2013), at 55 tonnes (INCB, 2011b). In subsequent years, the Iranian authorities limited pseudoephedrine imports and the production of medicines containing pseudoephedrine (Fahimi, 2019). The International Narcotics Control Board (INCB) reported that by 2015, the annual legitimate import requirement for pseudoephedrine raw material in Iran had decreased by almost 70 % (INCB, 2016). In 2019, pseudoephedrine imports were reported at 17 tonnes, with continued efforts by the authorities to reduce diversion from the pharmaceutical industry (INCB, 2019a). Overall, between 2008 and 2017, Iranian authorities seized 892 tonnes of precursor chemicals used for methamphetamine production (DCHQ, 2018).

Moreover, the collapse of the Iranian currency has meant that sourcing chemicals and equipment from neighbouring countries such as Iraq and Pakistan, where payment is often required in US dollars due to the volatility of the rial, has become prohibitively expensive. In early 2018, the unofficial exchange rate ([5]) averaged about IRR 45 000 to the US dollar, while by October 2020 the unofficial exchange rate exceeded IRR 320 000 (although it averaged IRR 270 000 in November

([3]) Interview 1, UNODC official, Tehran (remote interview), November 2020.

([4]) Interviews 2 and 3, Iranian methamphetamine producer, Tehran, April 2019, and follow-up August 2020 (remote interview).

([5]) The Iranian government's official exchange rate is determined by the Central Bank of Iran (CBI), which historically has significantly overvalued the Iranian rial in relation to other major currencies (GIATOC, 2020b). This official exchange rate is only accessible to some Iranian businesses and institutions and for the trade in specific goods (e.g. basic foodstuffs) (Farzanegan, 2009). Throughout this report, the unofficial exchange rate is used (adjusted for the time when figures were quoted), as it is the exchange rate accessible to the majority of Iranians and the one by which the majority of trade, including the trade in drugs, takes place.

2020) ([6]). Overall, regulatory changes and efforts to prevent the diversion of precursors, coupled with the decline of the Iranian currency since 2018, have raised the costs and drastically lowered the profits associated with domestic methamphetamine manufacturing.

Another contributing factor is an increase in the number of methamphetamine producers after 2010. A large-scale methamphetamine producer reported in an interview that when methamphetamine production started in Iran around 2004/2005, 'cooks' could expect to make a profit of up to USD 100 000 per kilogram ([7]). At the time, *shisheh* retailed for up to IRR 2 000 000 per gram, or about USD 200 (YJC, 2020b). However, subsequent years saw a rapid spread of methamphetamine production across the country, leading to higher availability and lower prices. In 2013, 445 laboratories were dismantled (see Table 2) (DCHQ, 2015). Overall, Iranian law enforcement reported dismantling 2 036 methamphetamine production sites in the period 2005-2017 (DCHQ, 2018). The entry of new 'cooks' on the Iranian market was also reported to have driven prices down considerably. In 2010, the price of methamphetamine was reported to have dropped by 400 % since *shisheh* had first become available in the early 2000s (Ghiabi, 2019). According to a methamphetamine 'cook' ([8]), producers could not expect more than USD 272-364 (IRR 30-40 million) in profits per kilogram by 2018/2019 ([9]), and only then if they were able to source cheap precursor chemicals as they would otherwise operate at a loss. Knowledge sharing between Iranian 'cooks' and their labourers contributed to this growth of the industry, as novices learned the trade from experienced producers and were then able to set up their own production facilities. According to an Iranian 'cook' and Iranian law enforcement ([10]), many of the labourers were said to be Afghan nationals, and this may have contributed to the later developments in *shisheh* production to Afghanistan. The UN High Commissioner for Refugees (UNHCR) estimates that 2.5 million Afghan nationals reside in Iran (both undocumented individuals and visa holders), in addition to more than 950 000 Afghan refugees (UNHCR, 2020). According to a UNHCR representative in Iran, the difficulties of Afghan nationals in obtaining work permits and visas in Iran have pushed them towards employment in informal and illicit activities, with the drug market being an important source of livelihood for marginalised and vulnerable Afghans ([11]). A 'cook' commenting on the recent reported decrease of methamphetamine production in Iran explained: 'many became addicted, some [cooks] were killed, and some moved to Afghanistan and Pakistan' (Alef, 2019).

([6]) Based on data from Bonbast, for January 2018, October 2020, and November 2020.

([7]) Interviews 2 and 3, Iranian methamphetamine producer, Tehran, April 2019, and follow-up August 2020 (remote interview).

([8]) Interviews 2 and 3, Iranian methamphetamine producer, Tehran, April 2019, and follow-up August 2020 (remote interview).

([9]) At the average unofficial exchange rate in December 2018.

([10]) Interviews 2 and 3, Iranian methamphetamine producer, Tehran, April 2019, and follow-up August 2020 (remote interview), and interviews 4 and 5, Iranian law enforcement officer, Tehran (remote interview), August and September 2020.

([11]) Interview 6, UNHCR official, Tehran, April 2019.

Lastly, interviews with law enforcement officials and an analysis of seizures reported in the media have indicated that both crystal and liquid methamphetamine, in addition to ephedrine, are trafficked from Afghanistan into Iran. In particular, law enforcement officials noted that liquid methamphetamine and ephedrine are smuggled in fuel trucks ([12]). The interviewees further noted that a proportion of the liquid methamphetamine and ephedrine smuggled into Iran is apparently processed into crystal methamphetamine in the country; this has also been reported by the Iranian media (Alef, 2019; Tabnak, 2019). As explained by two 'cooks' interviewed in an Iranian newspaper, payment for ephedrine trafficked from Afghanistan depends on the number of kilograms of drugs that can be produced from the precursor. For example, if 20 litres of ephedrine yields only 16 kg of methamphetamine, they pay for only 16 litres, as 'otherwise it is impure' (Alef, 2019). The 'cooks' reported that they would be satisfied with 20 litres of ephedrine yielding 18-19 kg of methamphetamine, since precursors are difficult to obtain, and ephedrine-containing pharmaceuticals are too expensive to procure (Alef, 2019). These interviews and an analysis of statements made in the Iranian media seem to indicate that Iranian 'cooks' have changed their modus operandi to either final-stage processing of Afghan methamphetamine, often in liquid form, or using Afghan ephedrine (probably extracted from ephedra) to produce methamphetamine that is mostly destined for external markets. This is a probable scenario, because Iranian 'cooks' are unlikely to be able to compete with the cheaper Afghan methamphetamine now available in the Iranian market.

TABLE 2

Methamphetamine production facilities dismantled and quantities of methamphetamine seized in Iran, 2012-2019 (based on data from the DCHQ, UNODC Annual Report Questionnaires (ARQs), and supplementary interviews)

Year	2012	2013	2014	2015	2016	2017	2018	2019
Number of facilities dismantled	214	445 (+107.9 %)	340 (−23.6 %)	216 (−36.5 %)	181 (−16.2 %)	141 (−22.1 %)	133 ([1]) (−5.67 %)	111 (−16.54 %)
Quantity of methamphetamine seized (kg)	2 664	3 677	2 644	2 143	1 770	2 302	2 989	17 000 ([2])

([1]) DCHQ annual reports do not provide data on the number of methamphetamine facilities dismantled after 2017. Figures for 2018 and 2019 were obtained in interviews with a UNODC official based in Tehran, November 2020.

([2]) Figures for methamphetamine seizures in 2019 cover the period March 2019 to March 2020.

([12]) Interviews 4 and 5, Iranian law enforcement officer, Tehran (remote interview), August and September 2020.

The Iranian methamphetamine market

After methamphetamine first gained a foothold in Iran, the prevalence of its use appears to have rapidly increased, as have the health costs associated with it. In 2010, it was estimated that one third of psychiatric hospital beds were occupied by methamphetamine users (DCHQ, 2015) and in 2015 there were an estimated 400 000 regular methamphetamine users (Ghiabi, 2019). While the DCHQ estimates that there are about 225 000 methamphetamine users living with substance use disorders in Iran (Mashregh, 2019a), recent reports have indicated that methamphetamine use is increasing again (Shahrar, 2020b; YJC, 2020c). On 20 June 2020, the Deputy Director of International Affairs at the DCHQ stated that methamphetamine use is 'unfortunately increasing day by day' (Shahrar, 2020a). In another statement, a DCHQ official noted that methamphetamine prices are showing 'a decreasing trend, and the rate of addiction to it is increasing' (Radio Zamaneh, 2020).

Decreasing prices

According to the Secretary-General of the DCHQ, drug prices (excluding methamphetamine) rose by roughly 70 % between March 2019 and March 2020 due to the collapse of the Iranian currency (Mashregh, 2020a). While methamphetamine prices were also likely to have been impacted initially, they are reported to have decreased by roughly 80 % ([13]) between March and September 2019 (Tabnak, 2019). This decrease in methamphetamine prices has been linked to the increased availability of cheap Afghan methamphetamine in Iran (Borna, 2019). According to treatment practitioners, as methamphetamine has become cheaper and more widely available, there has been a rise in levels of use, either alone or in combination with heroin ([14]).

According to the DCHQ, the wholesale price of Afghan methamphetamine was IRR 60 million (about USD 320) per kilogram in June 2020 in Iranian provinces close to the Afghan border (i.e. Sistan Baluchistan, South Khorasan and Razavi Khorasan), while it retailed for IRR 200-300 million (about USD 1 070-1 600) per kilogram in central and western provinces (Shahrar, 2020a) ([15]). In comparison, in early 2019, wholesale prices for methamphetamine were reported to be around IRR 800 million (about USD 6 800) per kilogram in central and western provinces ([16]) (Tabnak, 2019). In August 2020, methamphetamine sold for roughly IRR 400 000-500 000 (about USD 1.7-2.17) per gram ([17]) on the streets of Tehran (YJC, 2020b), representing a reduction of over 50 % in

([13]) The DCHQ did not specify whether this decrease in price was recorded at the wholesale or retail level.

([14]) Noted in interviews 7 and 8, with two Iranian treatment practitioners, Tehran (remote interviews), September and November 2020. Polydrug use of opiates and *shisheh* was also noted in Borna (2020c).

([15]) At the average unofficial exchange rate in June 2020.

([16]) At the average exchange rate in January 2020.

([17]) At the average exchange rate in August 2020.

street prices over the previous 12 months ([18]). However, in provinces closer to the Afghan border, prices as low as IRR 60 000 (about USD 0.26) per gram have been reported, although the experts interviewed noted that this figure may have been an underestimate (Radio Zamaneh, 2020).

TABLE 3
Methamphetamine prices at wholesale and retail levels in several provinces

Methamphetamine prices	Lower estimate (eastern border provinces)	Higher estimate (Tehran and western provinces)
Wholesale (kg)	IRR 60 000 000 (USD 320)	IRR 300 000 000 (USD 1 600)
Retail (g)	IRR 60 000 (USD 0.26)	IRR 500 000 (USD 2.17)

Increasing seizures

Iranian law enforcement reported methamphetamine seizures totalling roughly 17 tonnes between March 2019 and March 2020, a 208 % increase compared to the same period in the previous year. Although it is unclear how much of this was Afghan methamphetamine, Iranian officials have consistently stated that this large increase is due to the influx of Afghan *shisheh* ([19]). Between March and October 2019, the chief of Iran's Anti-Narcotics Police stated that 6 tonnes of Afghan *shisheh* had been seized along Iran's eastern border and in eastern provinces (Borna, 2019). Moreover, the chief stated that in just one week in November 2019, more than 600 kg of Afghan *shisheh* was seized in eastern border provinces (Mehr, 2019). Therefore, it is possible that a large portion of the 17 tonnes of methamphetamine seized between March 2019 and March 2020 was of Afghan origin, and that the increase in methamphetamine seizures may be due to the expanding methamphetamine industry in Afghanistan. On 15 November 2020, the head of the Iranian Anti-Narcotics Police announced the seizure of 10 tonnes of methamphetamine between March and November 2020, 90 % of which was reported to have been smuggled from Afghanistan (Babaei, 2020).

Methamphetamine is frequently seized in shipments that also contain opiates (see Table 4), which is likely to mean that pre-existing opiate trafficking routes are used for Afghan methamphetamine. For example, on 17 March 2020 a seizure near the border with Afghanistan found 592 kg of heroin and almost 74 kg of methamphetamine hidden in a truck carrying fuel from Afghanistan (YJC, 2020a). In another incident in Sistan Baluchistan Province (bordering Afghanistan and Pakistan) in

([18]) Based on observational data collected in open-air drug markets in Tehran, where methamphetamine prices in early/mid 2019 were reported at between IRR 1 000 000 and IRR 1 200 000 per gram.

([19]) The interviews conducted for this paper suggest that the methamphetamine seized in Iran is probably not systematically subject to forensic profiling in order to determine what starting material was used to produce it (ephedra plants or synthetic ephedrine or pseudoephedrine). However, Iranian officials have consistently stated that the increase in methamphetamine production in Afghanistan and seizures in Iran is due to the use in methamphetamine production of ephedrine extracted from the ephedra plant.

early June 2020, police seized 1.7 tonnes of opium, 369 kg of cannabis resin, 120 kg of heroin, and almost 98 kg of methamphetamine (Tasnim, 2020b). These examples show how Afghan opiates and methamphetamine are trafficked using the same routes, transporters and organised crime groups (see Table 4).

TABLE 4
Combined seizures of methamphetamine (> 10 kg) and opiates (> 10 kg) in Iran ([1])

Date	Location	Method	Drugs seized
17 March 2020 (YJC, 2020a)	Eastern border crossing (no further detail)	Concealed compartment in fuel truck	518.5 kg heroin 'crack' ([2]) 73.7 kg methamphetamine
21 March 2020 (Hamshahri, 2020a)	Nehbandan, South Khorasan Province	Truck	159.4 kg methamphetamine 58 kg opium
26 April 2020 (Borna, 2020a)	Nehbandan, South Khorasan Province	Backpacks of smugglers	35 kg heroin 12 kg methamphetamine
3 June 2020 (Tasnim, 2020b)	Khash, Sistan Baluchistan Province	Passenger vehicles (unspecified number)	1 740 kg opium 369 kg hashish 120 kg heroin 97.8 kg methamphetamine
22 June 2020 (Borna, 2020b)	Semnan Province	Four passenger vehicles	450.6 kg methamphetamine 278 kg heroin 69 kg opium
28 August 2020 (IRNA, 2020a)	Yazd, Yazd Province	Passenger vehicles (unspecified number)	380 kg opium 32 kg methamphetamine
9 September 2020 (IRNA, 2020b)	Saravan, Sistan Baluchistan Province	Three passenger vehicles	1 970 kg opium 19 kg heroin 10 kg methamphetamine
23 September 2020 (Moj, 2020)	Eastern Isfahan Province	Three passenger vehicles	80 kg opium 20 kg methamphetamine 400 g heroin
11 October 2020 (IMNA, 2020)	Sistan Baluchistan Province	Vehicles and depot	941.2 kg opium 411.2 kg hashish 25 kg methamphetamine
26 October 2020 (Quds, 2020)	Taybad, Razavi Khorasan Province	Two passenger vehicles	35 kg methamphetamine 18.1 kg opium

Date	Location	Method	Drugs seized
			10 kg heroin 200 g hashish
15 November 2020 (Hamshahri, 2020b)	Khash, Sistan Baluchistan Province	Three passenger vehicles	1 542 kg opium 562 kg hashish 51 kg methamphetamine

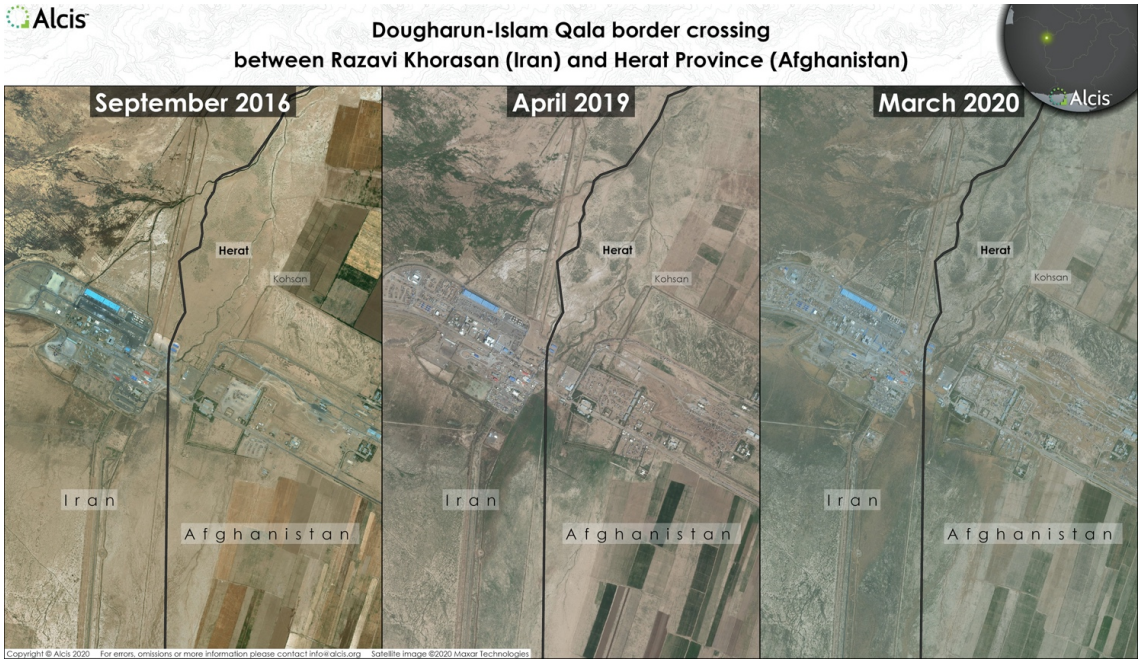
([1]) This is not an exhaustive list of instances when methamphetamine was seized alongside opiates. The table is based on a review of roughly 90 Iranian news articles from 2020 in which drug seizures were reported. Only seizures in excess of 10 kg of methamphetamine and 10 kg of opiates are included. Furthermore, the table only includes seizures where Iranian police reported that the drugs originated from Afghanistan, or where the drugs were seized along Iran's eastern border crossings with Afghanistan. Lastly, all the seizures included are single seizures from groups of drug traffickers.

([2]) Heroin 'crack', known locally as '*kerack*', emerged after the Taliban ban on opium poppy cultivation in 2000, which led to a shortage of opium and regular heroin in Iran (Alam-Mehrjerdi, 2013; Alam-Mehrjerdi et al., 2015). The substance is often in solid form that turns into a powder when crushed, and usually contains a mix of heroin, codeine, morphine and caffeine (Farhoudian et al., 2014). The substance's chemical composition enables users to inject it without the need to 'cook' it first, as is required before injecting other forms of heroin.

Based on information provided by key informants and drug seizures reported in the media, an analysis of satellite imagery of the Dougharun-Islam Qala border crossing was undertaken which highlighted the challenges of monitoring cross-border trade and stemming the flow of drugs through official border crossings (Figure 1). Dougharun-Islam Qala is one of the main official border crossings between Iran (Razavi Khorasan Province) and Afghanistan (Herat Province). Information provided by key informants highlighted that the capacity of Iranian law enforcement to monitor the flow of goods through this crossing is limited due to a lack of, or out of service, detection equipment such as X-ray scanners. Nevertheless, drug seizures including methamphetamine (e.g. Quds, 2020) regularly take place at this crossing from both passenger vehicles and trucks.

The lack of functioning equipment has consistently been identified by Iranian law enforcement as one of the major obstacles to stemming the flow of drugs through the country, an issue that has reportedly worsened due to renewed sanctions on Iran since 2018 (Mashregh, 2020b; Shahrar, 2020a). In Dougharun-Islam Qala, these issues are compounded by the large volume of goods that pass through the border daily. According to an Iranian official, up to 1 000 trucks a day crossed the border during 2019 (ECO, 2020). Satellite imagery shows that a large number of trucks are consistently waiting to cross into Iran from Afghanistan. For example, satellite images taken in March 2020 show several hundred trucks waiting to cross into Iran from Afghanistan. This has also been highlighted in other research (e.g. ECO, 2020).

Figure 1
Dougharun-Islam Qala Border Crossing, 2016-2020



The question of purity

Iranian 'cooks' have claimed that the ephedrine entering Iran from Afghanistan is of lower quality than that produced or diverted from the pharmaceutical industry in Iran, yielding lower purity methamphetamine (Alef, 2019). The supposed 'low quality' of Afghan methamphetamine is commonly mentioned in Iranian news media by state officials, who claim that Afghan *shisheh* has more impurities and negative health consequences than 'ordinary' methamphetamine. As noted by the chief of the Anti-Narcotics Police in October 2019, 'Afghan *shisheh* is very harmful and has many more negative health effects on consumers than other drugs … Afghan *shisheh* creates more dangers for the consumers' (Borna, 2019). The Secretary of the Razavi Khorasan Anti-Narcotics Coordination Council ([20]) said in an interview that Afghan methamphetamine has 'several times the destructive power of ordinary methamphetamine', and that 'it is offered at a very low price due to its high level of impurity' (SNN, 2019). As far as this research could ascertain, these statements do not appear to be supported by any forensic testing. In view of research findings from Afghanistan (EMCDDA, 2020) reporting potentially high-quality methamphetamine production, these statements by Iranian officials are probably intended to discourage people from consuming cheap Afghan methamphetamine. As noted by Iranian authorities, 'this drug is similar in appearance to ordinary meth and has no difference in colour, smell, or appearance compared to other meth. In principle,

([20]) Razavi Khorasan Province borders both Afghanistan and Turkmenistan.

this drug is the same as ordinary meth, but with more impurities' (Borna, 2019; SNN, 2019). Overall, further research is required to ascertain the purity and potency of Afghan-origin methamphetamine seized in Iran, as well as the possible presence of other harmful chemicals.

Trafficking of methamphetamine from Iran

A few years after methamphetamine production emerged in Iran in the mid-2000s, reports of the export of Iranian methamphetamine increased markedly. For this report, UNODC reports published between 2009 and 2020 (UNODC, 2009, 2010, 2011a, 2011b, 2013, 2014a, 2014b, 2015b, 2017a, 2019, 2020), INCB annual reports 2008-2019 (INCB, 2009, 2010, 2011a, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019b) and EMCDDA reports (e.g. EMCDDA, 2014; EMCDDA and Europol, 2019) were reviewed for additional information on historical and contemporary developments related to the trafficking of Iranian methamphetamine.

There are some reports of methamphetamine being smuggled into Iran in the period before 2008. However, after this date there are an increasing number of reports of methamphetamine being smuggled from Iran to other countries such as Indonesia, Japan, Malaysia, New Zealand and Thailand (INCB, 2011a). By 2009, the UNODC had identified the trafficking of methamphetamine by Iranian groups as a significant threat (UNODC, 2011b). Iranian groups had attempted to establish production facilities for amphetamine-type stimulants (ATS) in Malaysia and Thailand by 2010, and were particularly active in trafficking methamphetamine to countries in Southeast Asia and Oceania ([21]) (UNODC, 2011b, 2013). In 2010, more than 200 Iranians were arrested in Malaysia for the trafficking of ATS, and Iranians were one of the top two nationalities of individuals arrested for methamphetamine trafficking in Indonesia (UNODC, 2013). In Thailand, 82 Iranians were arrested for trafficking methamphetamine, and a total of 166 kg of crystal methamphetamine was seized at Suvarnabhumi International Airport in Bangkok in 2010 (UNODC, 2013). The UNODC's *World Drug Report* 2012 noted that 'seizures of methamphetamine in the region [Near and Middle East] also suggest that this market is emerging and expanding in Iran', and that 'branches of the Yakuza in Istanbul, Turkey, have begun smuggling into Japan methamphetamine illicitly manufactured on the territory of the Islamic Republic of Iran' (UNODC, 2012). Based on Annual Report Questionnaire (ARQ) data submitted to the UNODC between 2010 and 2012, and analysis conducted by Turkish police in 2012, the UNODC identified the emergence of methamphetamine trafficking from Iran to Europe (UNODC, 2014a). For example, methamphetamine seized in Bulgaria in 2011 was perceived to have originated in Iran (UNODC, 2014a), and the EMCDDA (2014) noted that Turkish law enforcement had identified attempts to deliver relatively small amounts of methamphetamine from Iran to Belgium and the United Kingdom in 2011 and 2012. Overall, the review of UNODC, INCB and EMCDDA reports showed that Iranian groups have been particularly active in trafficking methamphetamine to Southeast Asian countries, often using air couriers (UNODC, 2010, 2011a) transiting Gulf States (such as Dubai in the United Arab Emirates) (INCB, 2011a) or Turkey (particularly Ataturk Airport near Istanbul) (UNODC, 2014a). Iranian-linked groups were also

([21]) Indonesia, Japan, Malaysia, New Zealand and Thailand.

reported to have established methamphetamine production facilities in Japan, Malaysia and Thailand over the period reviewed.

Iranian groups have been involved in methamphetamine trafficking since 2008, but a substantial increase in the quantities of methamphetamine trafficked from Iran to other consumer markets globally seems to have occurred during 2019 and 2020, and this was probably facilitated by a change from using individual air couriers to the smuggling by sea of large quantities along opiate trafficking routes. The EMCDDA and Europol reported in 2019 that incidents of trafficking of methamphetamine produced in Iran to markets in the Middle East and Southeast Asia using couriers transiting airports had not been reported as frequently as in the past (EMCDDA and Europol, 2019). Moreover, there is evidence to suggest that Afghan methamphetamine is 'piggybacked' on heroin shipments smuggled along the Southern route (GIATOC, 2020a) ([22]). For example, the investigation that followed a seizure of 400 kg of heroin and 100 kg of methamphetamine in Sri Lanka in March 2020 suggested that the drugs had originated in Afghanistan and been trafficked from the Pakistan side of the Makran Coast. On this occasion, a Sri Lankan customs official noted that this was an 'indication of an emerging trend of meth produced in Afghanistan being smuggled out through an already well-established route for heroin trafficking to different parts of the world' (Pandey, 2020). Over the course of 2020, a number of record-breaking seizures of methamphetamine have been made in the Middle East and Asia, with the drugs being shipped from the southern coast of Iran or Pakistan and potentially of Afghan origin (see Table 5). Forensic profiling of these samples would help to determine whether the methamphetamine was manufactured from ephedrine extracted from ephedra plants (EMCDDA, 2020).

In 2020, the Combined Maritime Forces (CMF) made a number of seizures in the Arabian Sea and Northern Indian Ocean. In October 2020, the CMF made its largest ever methamphetamine haul when it seizing 450 kg from a dhow in the northern Arabian Sea (AP, 2020; CMF, 2020a). In November 2020, the CMF seized a further 450 kg of methamphetamine and 360 kg of heroin from a vessel in the Northern Indian Ocean (CMF, 2020b). The origin of the ships carrying these drugs has not been made public at the time of writing (December 2020) and forensic profiling of the seized methamphetamine is reported to be under way.

([22]) Research by the Global Initiative Against Transnational Organized Crime (GIATOC) has identified the potential spread of Afghan methamphetamine in eastern and southern Africa, with a new type of methamphetamine, known locally as 'Pakistani meth' but likely to be of Afghan origin, emerging on the South African market in early 2020. This research also indicated that Afghan methamphetamine is transiting countries such as Mozambique for distribution in the region (GIATOC, 2020a).

TABLE 5

Major methamphetamine seizures (> 100 kg) likely to have been shipped from Iran in 2020

Date	Location	Method	Quantity
April 2020 (Cormack, 2020)	Sydney, New South Wales, Australia	Concealed in water bottles	160 litres liquid methamphetamine *(confirmed to be from ephedra)*
22 May 2020 ([1]) (Assegaf, 2020)	Serang City, Banten Province, Indonesia	Smuggled by boat to the Banten Coast	821 kg crystal methamphetamine
June 2020 (Rochman, 2020)	Sakabumi District, West Java Province, Indonesia	Boat, handing over to local fishing boat in international waters	402 kg crystal methamphetamine
4 November 2020 (Al-Mulla, 2020)	Kuwait City, Kuwait	Hidden in salt bags in two shipping containers	260 kg methamphetamine
13 November 2020 (Al-Batati, 2020)	Coast of Mahra, Yemen	Concealed in plastic bags on board a boat	216 kg methamphetamine 730 kg cannabis resin

([1]) The seizure followed a four-month investigation by Indonesian authorities into a drug trafficking network based in the Middle East, which had yielded a seizure of 288 kg of methamphetamine in January 2020 (it is unclear whether these drugs were trafficked from Iran).

Turkey

While the scale of methamphetamine trafficking from Iran and Pakistan along the Southern route may be increasing, questions remain about the trafficking of methamphetamine along the Balkan route, destined for EU Member States or onward shipment. Turkey has historically been a key country on the Balkan route for opiates trafficked to the EU, with heroin and opium smuggled into Turkey directly from Iran, or diverted through other regions such as northern Iraq (KRI) before entering Turkey. The EMCDDA has consistently reported that Turkey is the country in Europe where the largest amount of methamphetamine is seized, with almost 564 kg seized in 2018 (down from 658 kg in 2017) ([23]). Some methamphetamine production appears to take place in Turkey (EMCDDA, 2014; Enson Haber, 2017; Haber Turk, 2019), and the Turkish media reports that Iranian ‘cooks’ are active in the country (Haber 7, 2017; Merkezi, 2018). However, a review of seizure data and reports from the UNODC, the EMCDDA and the INCB also indicates that Turkey has been an important transit point for Iranian methamphetamine to the EU and/or East and Southeast Asia and Oceania (see, for example, EMCDDA and Europol, 2019; INCB, 2014; UNODC, 2014a). Furthermore, as seizures of Afghan-origin ephedrine and liquid methamphetamine have

([23]) Based on EMCDDA seizure data.

been made in Iran ([24]), it is possible that some of these drugs and precursors may be trafficked onwards to Turkey for methamphetamine production.

In 2014, the INCB noted that 'the Islamic Republic of Iran … was identified as the source of almost all methamphetamine seized in Turkey primarily destined to markets in East Asia', following seizures of 403 kg of methamphetamine in 2012 (INCB, 2014). In 2014, the EMCDDA reported that 'evidence suggests that some of the methamphetamine produced in Iran and trafficked through Turkey along well-established heroin routes is destined for the European market' (EMCDDA, 2014). The 2019 EMCDDA-Europol threat assessment report noted that methamphetamine originating from Iran 'appears to be trafficked via Turkey to the European Union' (EMCDDA and Europol, 2019). The report further stated that methamphetamine produced in Iran is trafficked to consumer markets in Australia and Asia via hubs in the EU, often using air couriers through EU airports (EMCDDA and Europol, 2019). While the report noted that 'although some methamphetamine produced in Iran … may be sold on EU drug markets, the evidence available would suggest that this is on a very limited scale' (EMCDDA and Europol, 2019), the emergence of cheap Afghan methamphetamine trafficked through Iran may have the potential to compete with European producers by exploiting the Balkan route. Therefore, developments in the Iranian and Afghan methamphetamine markets appear to be of great relevance to EU Member States.

In late 2019 and throughout 2020, reports of methamphetamine seizures in eastern Turkey, often involving Iranian nationals and Iranian trucks, highlight the continued need to monitor the flow of *shisheh* from Iran, possibly of Afghan origin, into Turkey. Table 6 shows a number of methamphetamine seizures in eastern Turkey in 2020. Moreover, indications of the flow of methamphetamine from Iran into the KRI and subsequently into Turkey also highlight the potential diversification of methods (e.g. from trucks to couriers crossing by foot) and routes.

TABLE 6
Methamphetamine seizures in Eastern Turkey in 2020

Date	Location	Method	Quantity (kg)
March 2020 (Hazar, 2020)	Van Province	Concealed in a truck	8
August 2020 (Celik, 2020)	Agri Province, on border with Iran	Concealed in a truck with Iranian licence plates (one Iranian national arrested)	19.5
August 2020 (Celik, 2020)	Erzincan Province	Moulded into the frames of oil paintings and game boards	55

([24]) Noted in interview 4, Iranian law enforcement officer, Tehran (remote interview), August 2020, and interview 1, UNODC official, Tehran (remote interview), November 2020.

Date	Location	Method	Quantity (kg)
September 2020 (Merkezi, 2020)	Eastern Turkey (specific location not identified)	Concealed in a van	3.5
November 2020 (Toprak and Ulu, 2020)	Hakkari Province	Concealed in a light commercial vehicle	55

Kurdistan Region of Iraq

In recent years both licit and illicit trade across the porous parts of the Iran-Iraq border has increased commensurate with the economic pressures faced by the two countries, particularly as a result of the stricter sanctions imposed on Iran. It has been claimed that Iraq is the main destination of Iranian exports among neighbouring countries, and that roughly half of Iran's non-oil exports to Iraq are channelled through Kermanshah Province and into the KRI (Financial Tribune, 2020a). In April 2020, Iranian media reported that six official crossing points between Iran and the KRI were open (some of them had been closed for two months due to COVID-19), with between 700 and 800 trucks crossing the border from Iran each day (Financial Tribune, 2020a). As previously mentioned, a large amount of goods is also smuggled daily across the Iran-KRI border, with Kurdish couriers carrying both licit household goods and illicit goods across the border into Iran and often returning with drugs (Westcott and Ismaeli, 2019).

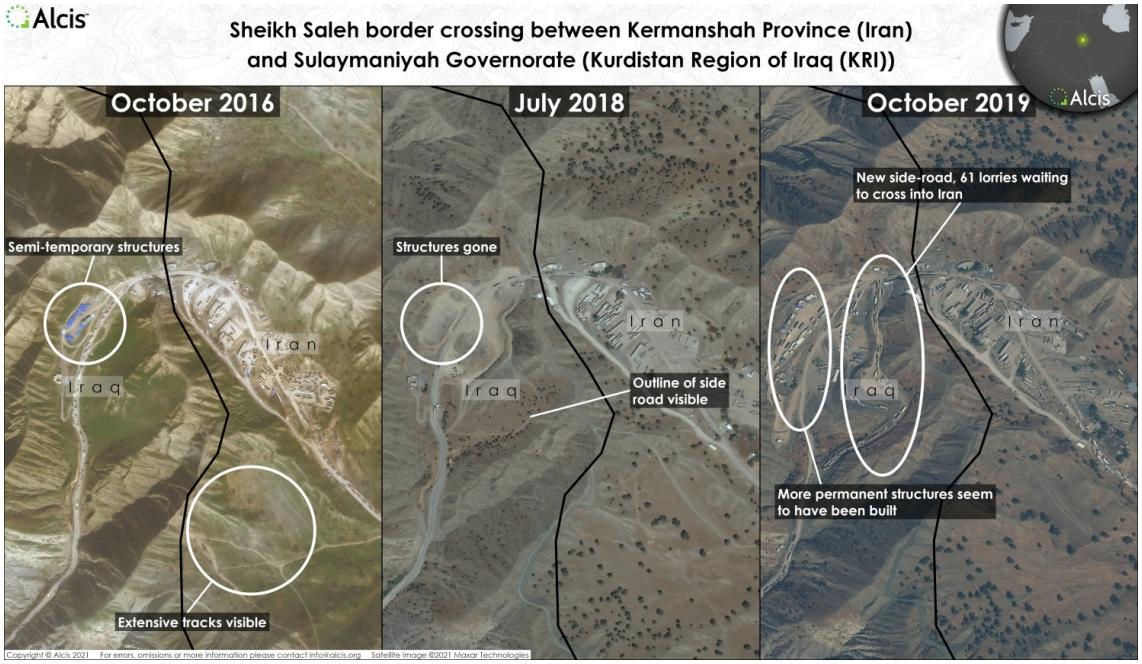
A 2014 academic paper noted that while amphetamine in the form of captagon tablets entered Iraq predominantly on ships from the Gulf and Saudi Arabia, methamphetamine was seized predominantly at land borders with Iran, and that it was 'likely that methamphetamine manufactured in Iran is being transported into Iraq' (Al-Hemiery et al., 2014). The media has reported a growing problem of methamphetamine use in Iraq (TNA, 2018). However, the proportion of methamphetamine trafficked from Iran into Iraq that is domestically consumed and re-exported on the Balkan route for shipment to Southeast Asia and Oceania or onwards to Europe remains unknown. Moreover, it is also possible that a proportion of the methamphetamine produced in Turkey is trafficked into Iraq for domestic consumption.

The Kurdish Regional Government (KRG) and Iraqi authorities regularly seize drugs passing through the country, particularly in villages in the KRI region where Iraq, Iran and Turkey meet (Sherwani, 2020a). In 2019, the KRG arrested 1 702 suspects (Sherwani, 2020a), and in the first half of 2020, the KRG arrested 586 suspects for drug trafficking/dealing or possession (Sherwani, 2020b). Methamphetamine seizures in the KRI are reported with some frequency (Shilani, 2020). In July 2020, for example, the KRG's Anti-Narcotics Directorate announced the arrest of two individuals for smuggling 15 kg of methamphetamine from Iran into the KRI, for onward shipment to Turkey (Sherwani, 2020b). Considering the daily volume of goods, and the limited capacity of the KRG authorities to monitor the border comprehensively, traffickers appear to be exploiting this border in order to smuggle drugs for onward shipment. Overall, the drug trafficking flows in this sensitive border area merit further attention and monitoring.

Based on information provided by key informants, a review of satellite imagery from a section of the border between Iran and the KRI was undertaken (see Figure 2). Through this review, a number of informal crossings were identified based on tracks visibly running across several sections of the border, indicating possible use by vehicles, persons and animals (e.g. donkeys). In addition, several potential sites were identified where smuggled goods could be temporarily stored before being distributed to couriers to be brought across the border. An analysis was also undertaken of formal crossings between Iran and the KRI. Figure 3 shows the growth of the Sheikh Saleh border crossing point between Kermanshah Province in Iran and Sulaymaniyah Governorate (KRI). This location was identified as a point of interest by informants due to the large volume of goods that currently cross on a daily basis and the low level of monitoring by authorities on either side. The Sheikh Saleh crossing was officially approved by the Iranian parliament on 7 August 2019. However, as indicated by key informants and verified by the satellite imagery, it operated as an informal border crossing for several years. The lack of border infrastructure (as seen in the satellite imagery) and monitoring equipment (as highlighted by key informants) underscores the potential for traffickers to exploit this crossing point for the smuggling of illicit goods.

FIGURE 2
Points of interest along a section of the Iran-Iraq border

FIGURE 3
Satellite Images of Sheikh Saleh border crossing point, 2016-2019


Alcis
Sheikh Saleh border crossing between Kermanshah Province (Iran)
and Sulaymaniyah Governorate (Kurdistan Region of Iraq (KRI))
October 2016
July 2018
October 2019
Semi-temporary structures
Structures gone
New side-road, 61 lorries waiting to cross into Iran
Iran
Iraq
Outline of side road visible
More permanent structures seem to have been built
Extensive tracks visible
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Australia

Methamphetamine trafficking from Iran to Australia illustrates the capacity of Iranian drug trafficking networks to adapt and supply drugs to international markets. Since 2018, there have been several seizures in Australia of methamphetamine with links to Iran. For example, in February 2018, two Iranian nationals were arrested in Sydney following a joint operation by Australian and Turkish law enforcement (AFP, 2018). The two men had organised the trafficking of almost 10 kg of methamphetamine from Turkey by concealing the drugs in jars of Iranian honey (AFP, 2018, 2020) within a consignment arriving by air cargo in Sydney on 29 December 2017. Postal smuggling of methamphetamine to Australia directly from Iran has also taken place. For instance, in October 2018, Tehran's Anti-Narcotics Police seized 1.6 kg of methamphetamine bound for Australia, arresting one Iranian in connection with the seizure (ISNA, 2018).

During 2020, Australian law enforcement noted an apparent increase in methamphetamine trafficking from Iran, with Afghanistan as the potential country of origin ([25]). In February 2020, Australia's Joint Agency Ice Strike Team (JAIST) ([26]) seized 11 pieces of artwork that were sent

([25]) Noted in information provided by Australian law enforcement agencies between July and November 2020.

([26]) The JAIST is made up of South Australia Police, Australian Federal Police, Australian Border Force, Australian Criminal Intelligence Commission, Australian Taxation Office, Department of Home Affairs, and Australian Transactions and Analysis Centre.

from northern Tehran to Australia. The artwork was found to contain 32.75 kg of methamphetamine, which was reported as 'high quality' (National Tribune, 2020). The seized methamphetamine is reported to have been sent to the Australian Federal Police (AFP) for further testing in order to determine if it was manufactured using plant-derived ephedrine. On 24 April 2020, Australian law enforcement seized 160 litres of liquid methamphetamine concealed in bottled water (Cormack, 2020). The drugs were shipped from Iran and arrived by air cargo in Australia (Sydney) in early April. Analysis by the AFP has indicated that the methamphetamine was manufactured using plant-derived ephedrine (Kermani, 2020) ([27]). Moreover, in November 2020, 20 kg of methamphetamine was shipped from Iran concealed inside the pieces of a portable disinfectant tunnel (Mirage, 2020). The ability of Iranian drug trafficking organisations to supply methamphetamine so far afield could be viewed as a risk for Europe.

TABLE 7
Australian seizures of methamphetamine reported to be trafficked from Iran, 2020

Date	Location	Method	Quantity
February 2020 (National Tribune, 2020)	South Australia	Concealed in 11 pieces of artwork (post — unclear if air or maritime freight)	32.75 kg
24 April 2020 (Cormack, 2020)	Sydney, New South Wales	Concealed in water bottles (air cargo)	160 litres
3 November 2020 (Mirage, 2020)	Sydney, New South Wales	Concealed inside the pieces of a portable 'disinfectant tunnel' (air cargo)	20 kg

([27]) Noted in information provided by Australian Federal Police, July 2020.

Conclusion

This exploratory research has found evidence of a large increase in Iranian methamphetamine seizures reported to originate from Afghanistan in recent years. It appears probable that Afghan *shisheh* is smuggled along pre-existing opiate trafficking routes, particularly the Southern route and perhaps also the Balkan route, with the drugs ending up as far afield as Australia.

Questions remain about the scale of methamphetamine (in both solid crystal and liquid forms) and ephedrine trafficking into Iran from Afghanistan. Preliminary data suggest that methamphetamine seizures in Iran have continued to increase from a record high of 17 tonnes in the period March 2019-March 2020. Further work with Iranian law enforcement would be useful to determine the scale of liquid methamphetamine and ephedrine trafficking from Afghanistan, which could indicate further processing in Iran for onward shipment, and to estimate the scale of methamphetamine production in Iran using Afghan-origin ephedrine.

Further research and engagement with Iraqi and Turkish authorities would be beneficial to better estimate the scale of methamphetamine trafficking westwards out of Iran. The porous border with the KRI seems particularly vulnerable for exploitation by drug trafficking organisations. As such, further monitoring of methamphetamine seizures in Iraq is needed. Forensic profiling of methamphetamine seizures in Iran, Iraq and Turkey would be advantageous to determine the synthetic route (ephedrine from ephedra, or otherwise) and would greatly enhance our understanding of how much of the methamphetamine or its precursors originate in Afghanistan. Additionally, monitoring and forensic analysis of methamphetamine seized along the Southern route would be needed to determine the potential scale of Afghan methamphetamine flows.

References

AFP (Australian Federal Police) (2018, February 22), 'Turkish tip-off leads to arrests over imported meth', *Australian Federal Police* (https://www.afp.gov.au/news-media/media-releases/turkish-tip-leads-arrests-over-imported-meth).

AFP (Australian Federal Police) (2020, September 11), 'Iranian national jailed for meth importation', *Australian Federal Police* (https://www.afp.gov.au/news-media/media-releases/iranian-national-jailed-meth-importation).

Al-Batati, S. (2020, November 14), 'Boat carrying 1,000 kg of drugs seized by Yemeni Coast Guard', *Arab News* (https://arab.news/prc2k).

Al-Mulla, Y. (2020, November 5), 'Ministry of Interior announces largest seizure of meth in Kuwait's history', *Gulf News*, (https://gulfnews.com/world/gulf/kuwait/ministry-of-interior-announces-largest-seizure-of-meth-in-kuwaits-history-1.75075910).

Al-Hemiery, N., Al-Diwan, J., Hasson, A. and Rawson, R. (2014), 'Drug and Alcohol Use in Iraq: Findings of the Inaugural Iraqi Community Epidemiological Workgroup', *Substance Use and Misuse* 49 (13), pp. 1759-1763.

Alam-Mehrjerdi, Z. (2013), 'Crystal in Iran: methamphetamine or heroin kerack', *DARU Journal of Pharmaceutical Sciences* 21 (22), doi: doi:10.1186/2008-2231-21-22.

Alam-Mehrjerdi, Z., Abdollahi, M., Higgs, P. and Dolan, K. (2015), 'Drug use treatment and harm reduction programs in Iran: A unique model of health in the most populated Persian Gulf country', *Asian Journal of Psychiatry* 16 (2015), pp. 78-83, doi:10.1016/j.ajp.2015.06.002.

Alef (2019, October 9), 'Shocking remarks of 2 former glass chefs / 167 thousand billion Tomans turnover of drugs' (اظهارات تکان‌دهنده ۲ آشپز سابق شیشه/ گردش مالی ۱۶۷ هزار میلیارد تومانی مواد مخدر), *Alef News* (https://www.alef.ir/news/3980717077.html).

AP (Associated Press) (2020, October 21), 'UK warship seizes 450 kilograms of meth in Arabian Sea', *The Associated Press* (https://apnews.com/article/dubai-iran-united-arab-emirates-persian-gulf-tensions-middle-east-d20f1735e0208f0c0f5873fa54612bfc).

Assegaf, F. (2020, May 23), 'Indonesian Police bust 821-kg crystal meth following warehouse raid', *Antara News*, *November*, 1-6 (https://en.antaranews.com/news/149235/indonesian-police-bust-821-kg-crystal-meth-following-warehouse-raid).

Babaei (2020, November 15), 'Afghanistan's shocking contribution to meth smuggling into the country' (سهم تکان‌دهنده افغانستان از قاچاق شیشه به کشور), *Iranian Students News Agency (ISNA)* (https://www.isna.ir/news/99082516754/سهم-تکان-دهنده-افغانستان-از-قاچاق-شیشه-به-کشور).

Borna (2019, October 30), 'This new drug reduced the price of meth' (این مخدر جدید قیمت شیشه را کاهش داد), *Borna News* (https://www.borna.news/fa/tiny/news-918023).

Borna (2020a, April 26), 'Discovery of 47 kilos of heroin and meth from pedestrians' (کشف 47 کیلو هروئین و شیشه از عابر پیاده), *Borna News* (https://www.borna.news/fa/tiny/news-993529).

Borna (2020b, June 22), 'Discover one of the largest shipments of glass in the country', *Borna News* (https://www.borna.news/fa/tiny/news-1018251).

Borna (2020c, November 19), 'Meth, the most addictive drug in Iran' (شیشه، اعتیاد آورترین مواد مخدر در ایران). *Borna News* (https://www.borna.news/-شیشه-اعتیاد-آورترین-مواد-مخدر-در-ایران-1085190/75-بخش-خراسان-شمالی).

Celik, A. (2020, August 24), 'Turkey: Over 2,000 kg of marijuana seized', *Anadolu Agency* (https://www.aa.com.tr/en/turkey/turkey-over-2-000-kg-of-marijuana-seized/1951616).

CMF (Combined Maritime Forces) (2020a, October 21), 'Combined Maritime Forces seizes over 450kg drugs in its largest methamphetamine drug bust', *Combined Maritime Forces* (https://combinedmaritimeforces.com/2020/10/21/combined-maritime-forces-seizes-over-450kg-drugs-in-its-largest-methamphetamine-drug-bust/).

CMF (2020b, November 21), 'Combined Maritime Forces seize over 450kg methamphetamine and 360kg heroin in third drug bust since October', *Combined Maritime Forces* (https://combinedmaritimeforces.com/2020/11/21/combined-maritime-forces-seize-over-450kg-methamphetamine-and-360kg-heroin-in-third-drug-bust-since-october/).

Cormack, L. (2020, April 24), 'ABF seize $80m liquid meth shipment from Middle East', *Sydney Morning Herald* (https://www.smh.com.au/national/nsw/two-charged-after-80-million-of-liquid-meth-found-inside-bottles-of-mineral-water-20200424-p54mtw.html).

DCHQ (Drug Control Headquarters) (2015), *Drug Control in 2014*, DCHQ, Niktasvir Publishing.

DCHQ (2018), *Islamic Republic of Iran: 40 Years on the Front Line of the Combat Against the World Drug Problem (1979-2018)*, DCHQ.

DCHQ (2020), *Annual Report of the Islamic Republic of Iran's Drug Control Activities in 2019*, DCHQ.

ECO (Economic Cooperation Organization) (2020), *Final Report: Project for Development of Kyrgyz-Tajikistan-Afghanistan-Iran (KTAI) Road Transport Corridor*, ECO (https://www.iru.org/system/files/Final report - Project for development of Kyrgyz-Tajikistan-Afghanistan-Iran %28KTAI%29 road transport corridor.pdf).

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2014), *Exploring methamphetamine trends in Europe*, EMCDDA Papers, Publications Office of the European Union, Luxembourg (https://www.emcdda.europa.eu/publications/emcdda-papers/exploring-methamphetamine-trends-in-Europe_en).

EMCDDA (2020), *Emerging evidence of Afghanistan's role as a producer and supplier of ephedrine and methamphetamine*, EU4MD Special Report, Publications Office of the European Union, Luxembourg.

EMCDDA and Europol (2019), *Methamphetamine in Europe: EMCDDA-Europol threat assessment,* (https://www.emcdda.europa.eu/system/files/publications/12132/20195788_TD0119853ENN.pdf).

Enson Haber (2017, October 23), 'Raid of the drug manufacturer's apartment' (Uyuşturucu imalatçısının dairesine baskın)' *Enson Haber* (https://www.yenisafak.com/gundem/en-tehlikelilerinden-olan-madde-beylikduzunde-yakalandi-3412374).

Fahimi, F. (2019), 'Methamphetamine manufactured from pseudoephedrine; Both as double-edged swords', *Journal of Pharmaceutical Care* 7 (4), pp. 80-81, doi:10.18502/jpc.v7i4.2374.

Farhoudian, A., Sadeghi, M., Khoddami Vishteh, H. R., Moazen, B., Fekri, M. and Rahimi Movaghar, A. (2014), 'Component analysis of Iranian crack; a newly abused narcotic substance in Iran', *Iranian Journal of Pharmaceutical Research* 13 (1), pp. 337-344 (https://pubmed.ncbi.nlm.nih.gov/24734089).

Farzanegan, M. R. (2009), 'Illegal trade in the Iranian economy: Evidence from a structural model', *European Journal of Political Economy* 25 (4), pp. 489-507, doi:10.1016/j.ejpoleco.2009.02.008

Financial Tribune (2020a, April 29), 'Two Iranian Border Crossings Resume Trade With Iraqi Kurdistan', *Financial Tribune* (https://financialtribune.com/articles/domestic-economy/103101/two-iranian-border-crossings-resume-trade-with-iraqi-kurdistan).

Financial Tribune (2020b, May 16), 'Parliamentary Probe Zeros In on Smuggling', *Financial Tribune* (https://financialtribune.com/node/103397).

Ghiabi, M. (2019), *Drugs Politics: Managing Disorder in the Islamic Republic of Iran*, Cambridge University Press (https://www.cambridge.org/core/books/drugs-politics/E2EFB2A2A59AC5C2D6854BC4C4501558).

GIATOC (Global Initiative Against Transnational Organized Crime) (2020a), *Civil Society Observatory of Illicit Economies in Eastern and Southern Africa: Risk Bulletin Issue 12 (September-October 2020)* (https://globalinitiative.net/analysis/esaobs-risk-bulletin-12/).

GIATOC (2020b), *Under the Shadow: Illicit Economies in Iran* (https://globalinitiative.net/analysis/under-the-shadow-illicit-economies-in-iran/)

Haber 7 (2017, August 21), 'They were caught in Istanbul! Both Iranian' (İstanbul'da yakalandılar! İkisi de İranlı), *Haber 7* (https://www.haber7.com/guncel/haber/2406759-istanbulda-yakalandilar-ikisi-de-iranli).

Haber Turk (2019, February 7), '4 people were arrested at home in Bolu' (Bolu'da evde uyuşturucu), *Haber Turk* (https://www.haberturk.com/bolu-da-evde-uyusturucu-imalati-yapan-4-kisi-tutuklandi-2359564).

Hamshahri (2020a, March 21), 'Discovery of 245 kg of meth and opium from a truck in Nehbandan' (کشف ۲۴۵ کیلوگرم شیشه و تریاک از یک کامیون در نهبندان), *Hamshahri* (https://hamshahrionline.ir/x6cWH).

Hamshahri (2020b, November 15), 'Discovery of 2 tonnes of drugs in Khash' (کشف ۲ تن مواد مخدر در خاش), *Hamshahri* (https://hamshahrionline.ir/x6Prm).

Hazar, N. (2020, March 20), 'Turkey: Over 7 kg of meth seized in anti-drug operation', *Anadolu Agency* (https://www.aa.com.tr/en/turkey/turkey-over-7-kg-of-meth-seized-in-anti-drug-operation/1772737).

IMNA (Iran Metropolises News Agency) (2020, October 11), 'More than a ton of drugs were discovered in Sistan and Baluchestan' (بیش‌از یک تن موادمخدر در سیستان و بلوچستان کشف شد). *Iran Metropolises News Agency* (https://www.imna.ir/news/449220).

INCB (International Narcotics Control Board) (2009), *Report of the International Narcotics Control Board for 2008*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2009.html).

INCB (2010), *Report of the International Narcotics Control Board for 2009*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2010.html).

INCB (2011a), *Report of the International Narcotics Control Board for 2010,* United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2011.html).

INCB (2011b), *Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances*, United Nations, New York (https://www.incb.org/documents/PRECURSORS/TECHNICAL_REPORTS/OLDER-REPORTS/2010/PrecursorsReport2010_Rev_E_V10579291.pdf).

INCB (2012), *Report of the International Narcotics Control Board for 2011*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2012.html).

INCB (2013), *Report of the International Narcotics Control Board for 2012*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2013.html).

INCB (2014), *Report of the International Narcotics Control Board for 2013*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2014.html).

INCB (2015), *Report of the International Narcotics Control Board for 2014*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2015.html).

INCB (2016), *Report of the International Narcotics Control Board for 2015*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2016.html).

INCB (2017), *Report of the International Narcotics Control Board for 2016*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2017.html).

INCB (2018), *Report of the International Narcotics Control Board for 2017*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2018.html).

INCB (2019a), *Annual legitimate requirements (ALR) as reported by Governments for imports of ephedrine, pseudoephedrine, 3,4-methylenedioxyphenyl-2-propanone, 1-phenyl-2-propanone and their preparations* INCB (https://www.incb.org/documents/PRECURSORS/ANNUAL-LICIT-REQUIREMENTS/INCB_ALR_WEB.pdf).

INCB (2019b), *Report of the International Narcotics Control Board for 2018*, United Nations, New York (https://www.incb.org/incb/en/publications/annual-reports/annual-report-2019.html).

IRNA (Islamic Republic News Agency) (2020a, August 28), '412 kg of drugs were discovered in Yazd' (۴۱۲ کیلوگرم موادمخدر در یزد کشف شد), IRNA (https://www.irna.ir/news/84019339).

IRNA (2020b, September 9), 'More than 2.5 tonnes of narcotics were discovered in Sistan and Baluchestan' (بیش‌از ۲٫۵ تن موادمخدر در سیستان و بلوچستان کشف شد), IRNA (https://www.irna.ir/news/84030007).

ISNA (Iranian Students News Agency) (2018, October 23), 'National ID Card leaked meth smuggling to Australia' (کارت‌ملی، قاچاق شیشه به استرالیا را لو داد), Iranian Students News Agency (ISNA) (https://www.isna.ir/news/98080100571/).

Kermani, S. (2020, November 24), 'Afghanistan, home to the heroin trade, moves into meth', BBC (https://www.bbc.co.uk/news/world-asia-55048147).

Khajeamiri, A. R., Faizi, M., Sohani, F., Baheri, T. and Kobarfard, F. (2012), 'Determination of impurities in illicit methamphetamine samples seized in Iran', *Forensic Science International* 217 (1), pp. 204-206, doi: 10.1016/j.forsciint.2011.11.005.

Malekzadeh, M. M., Khademi, H., Pourshams, A., Etemadi, A., Poustchi, H., Bagheri, M., Khoshnia, M., Sohrabpour, A. A., Aliasgari, A., Jafari, E., Islami, F., Semnani, S., Abnet, C. C., Pharoah, P. D. P., Brennan, P., Boffetta, P., Dawsey, S. M., Malekzadeh, R. and Kamangar, F. (2013), 'Opium use and risk of mortality from digestive diseases: a prospective cohort study', *The American Journal of Gastroenterology* 108 (11), pp. 1757-1765, doi:10.1038/ajg.2013.336.

Mashregh (2019a, August 21), 'The cost of drugs in Iran is equal to half of the country's budget' (هزینه مواد مخدر در ایران برابر با نیمی از بودجه کشور است), *Mashregh News* (https://www.mashreghnews.ir/news/985768/هزینه-مواد-مخدر-در-ایران-برابر-با-نیمی-از-بودجه-کشور-است).

Mashregh (2019b, September 3), 'Official statistics of drug users in the country' (آمار رسمی مصرف کنندگان مواد مخدر در کشور), *Mashregh News* (https://www.mashreghnews.ir/news/989427/آمار-رسمی-مصرف-کنندگان-مواد-مخدر-در-کشور).

Mashregh (2020a, June 20), 'Drug prices have risen by 70%' (قیمت مواد مخدر ۷۰ درصد افزایش داشته است), *Mashregh News* (https://www.mashreghnews.ir/news/1085895/قیمت-مواد-مخدر-۷۰-درصد-افزایش-داشته-است).

Mashregh (2020b, June 20), 'The most unprecedented volume of drug discovery in the world by Iran' (بی‌سابقه‌ترین حجم کشف مواد مخدر در دنیا توسط ایران), *Mashregh News* (https://www.mashreghnews.ir/news/1085703/بی-سابقه-ترین-حجم-کشف-مواد-مخدر-در-دنیا-توسط-ایران).

Mashregh (2020c, June 23), 'How many people in the country are involved in drugs?' (چند نفر در کشور درگیر مواد مخدر هستند؟), *Mashregh News* (https://www.mashreghnews.ir/news/1087127/چند-نفر-در-کشور-درگیر-مواد-مخدر-هستند).

Mehr (2019, November 19), 'The head of the anti-narcotics police informed Mehr: Discovered more than 600 kilos of Afghan glass in the past week' (رئیس پلیس مبارزه با موادمخدر به مهر خبر داد کشف بیش از ۶۰۰ کیلو شیشه افغانی در یک هفته گذشته), *Mehr News Agency* (https://www.mehrnews.com/news/4775824/کشف-بیش-از-۶۰۰-کیلو-شیشه-افغانی-در-یک-هفته-گذشته).

Merkezi, H. (2018, December 1), 'The most dangerous item in the world was caught in Beylikdüzü' (Dünyanın en tehlikelilerinden olan madde Beylikdüzü'nde yakalandı), *Yeni Şafak* (https://www.yenisafak.com/gundem/en-tehlikelilerinden-olan-madde-beylikduzunde-yakalandi-

3412374).

Merkezi, H. (2020, September 2), 'Close to 400K liras worth of methamphetamine seized in eastern Turkey', *Yeni Şafak* (https://www.yenisafak.com/en/video-gallery/news/close-to-400k-liras-worth-of-methamphetamine-seized-in-eastern-turkey-2204786).

Mirage (2020, November 12), 'Police arrest man over meth in portable medical shower', *Mirage News* (https://www.miragenews.com/police-arrest-man-over-meth-in-portable-medical-shower/).

Moj (2020, September 23), 'Discovery of 100 kilos of drugs in Isfahan / arrest of 6 death dealers' (کشف 100 کیلو مواد مخدر در اصفهان / دستگیری 6 سوداگر مرگ), *Moj News Agency*, 10-11 (https://www.mojnews.com/fa/tiny/news-346787).

National Tribune (2020, July 5), 'Police have a clearer picture of drug network after meth find', *The National Tribune* (https://www.nationaltribune.com.au/police-have-a-clearer-picture-of-drug-network-after-meth-find/).

Pandey, D. K. (2020, March 22), 'Seizure of Afghan meth on high seas triggers concern', *The Hindu*.

Quds (2020, October 26), 'Khorasan-e-Razavi border guards discovered more than 60 kilograms of drugs along with illegal weapons from smugglers' (کشف بیش از ۶۰ کیلوگرم مواد مخدر به همراه سلاح غیر مجاز از قاچاقچیان توسط مرزبانان خراسان رضوی), *Quds Online* (http://qudsonline.ir/news/725276/).

Radio Farda (2020a, May 14), 'Almost All Smuggled Goods Into Iran Come Through Legal Ports', *Radio Farda* (https://en.radiofarda.com/a/almost-all-smuggled-goods-into-iran-come-through-legal-ports/30611748.html).

Radio Farda (2020b, September 6), 'The Secretary General of the Anti-Narcotics Headquarters called for an increase in the time of imprisonment of addicts' (دبیرکل ستاد مبارزه با مواد مخدر خواستار افزایش زمان زندان معتادان شد), *Radio Farda* (https://www.radiofarda.com/a/30823844.html).

Radio Zamaneh (2020, June 20), 'Deputy Chief of Staff for Counter Narcotics: The destination of all European morphine discoveries' (معاون ستاد مبارزه با مواد مخدر: مقصد همه کشفیات مرفین اروپاست), *Radio Zamaneh* (https://www.radiozamaneh.com/512919).

Rochman, F. (2020, October 5), 'Police hand 13 suspects of Iran drug-trafficking ring to prosecutor', *Antara News* (https://en.antaranews.com/news/158261/police-hand-13-suspects-of-iran-drug-trafficking-ring-to-prosecutor).

Shahrar (2020a, June 20), 'The price of drugs became more expensive / the price of meth in some provinces is 20 to 30 million tomans' (قیمت مواد مخدر گران شد/ قیمت شیشه در برخی استان‌ها ۲۰ تا ۳۰ میلیون تومان), *Shahrar News* (https://shahraranews.ir/00086E).

Shahrar (2020b, November 1), 'Worrying increase in meth consumption by young couples' (افزایش نگران‌کننده مصرف شیشه توسط زوج‌های جوان), *Shahrar News* (https://shrr.ir/000Cd2).

Sherwani, H. (2020a, June 21), 'Erbil security forces seize over 6 kilograms of marijuana, opium, and crystal meth', *Kurdistan24* (https://www.kurdistan24.net/en/news/a8a21d76-7d25-4b5b-

89a6-e692546b3c52).

Sherwani, H. (2020b, July 26), 'Erbil's security forces arrest suspected drug traffickers, confiscate 15 kilograms of narcotics', *Kurdistan24* (https://www.kurdistan24.net/en/news/8ffb67ee-195d-4ccd-9a85-cca5ed449e32).

Shilani, H. (2020, June 24), 'Kurdistan confiscates 9 kg of illegal drugs in second major bust this week', *Kurdistan24* (https://www.kurdistan24.net/en/news/64758f3f-b04c-4113-bba7-1273b7848bbb).

SNN (Student News Network) (2019, December 4), 'A new drug that is more terrifying than meth' (مخدری جدید که از شیشه هولناکتر است), *Student News Network (SNN)* (https://snn.ir/fa/news/809721/مخدری-جدید-که-از-شیشه-هولناکتر-است).

Tabnak (2019, October 7), 'Meth went from 80 million to 18 million tomans per kilogram' (شیشه از کیلویی ۸۰ میلیون به ۱۸ میلیون تومان رسید!), *Tabnak* (https://www.tabnak.ir/fa/news/928242/شیشه-از-کیلویی-۸۰-میلیون-به-۱۸-میلیون-تومان-رسید).

Tasnim (2020a, June 3), 'Arrest of 3,056 people on drug trafficking charges' (بازداشت ۳۰۵۶ نفر به اتهام قاچاق موادمخدر), *Tasnim News Agency* (https://tn.ai/2279155).

Tasnim (2020b, June 3), 'Destruction of drug trafficking gangs in Sistan and Baluchestan / More than two tons of drugs discovered' (انهدام باند حرفه‌ای قاچاق مواد مخدر در سیستان و بلوچستان/ بیش از دو تن مواد مخدر کشف شد), *Tasnim News Agency* (https://tn.ai/2279060).

Tasnim (2020c, June 17), 'Arrest of 4,151 drug traffickers in prisons / Afghanistan is the center of world meth production' (بازداشت ۴۱۵۱ نفر از عوامل انتقال موادمخدر به زندانها/ افغانستان قطب تولید شیشه جهان است), *Tasnim News Agency* (https://www.tasnimnews.com/fa/news/1399/03/28/2287240/بازداشت-4151-نفر-از-عوامل-انتقال-موادمخدر-به-زندانها-افغانستان-قطب-تولید-شیشه-جهان-است).

TNA (The New Arab) (2018, January 2), 'Basra: The epicentre of Iraq's drug problem', *TNA* (https://english.alaraby.co.uk/english/society/2018/1/2/basra-the-epicentre-of-iraqs-drug-problem).

Toprak, I. and Ulu, U. (2020, November 2), 'Over 57 kg of meth seized in Turkey', *Anadolu Agency* (https://www.aa.com.tr/en/turkey/over-57-kg-of-meth-seized-in-turkey/2028331).

UNHCR (United Nations High Commissioner for Refugees) (2020), *Refugees in Iran, UNHCR* (https://www.unhcr.org/ir/refugees-in-iran/).

UNODC (United Nations Office on Drugs and Crime) (2009), *Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs in East and South-East Asia (and neighbouring regions), UNODC, Vienna (https://www.unodc.org/unodc/en/scientists/patterns-and-trends-of-amphetamine-type-stimulants-and-other-drugs-in-east-and-south-east-asia-and-neighbouring-regions.html)*.

UNODC (2010), *Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs: Asia and the Pacific, UNODC, Vienna (https://www.unodc.org/documents/scientific/ATS_Report_2010.pdf)*.

UNODC (2011a), *Global Smart Update 2011: Volume 5*, UNODC, Vienna (https://www.unodc.org/unodc/en/scientists/global-smart-update-2011---vol-5.html)

UNODC (2011b), *Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs: Asia and the Pacific*, UNODC, Vienna (https://www.unodc.org/unodc/en/scientists/patterns-and-trends-of-amphetamine-type-stimulants-and-other-drugs---asia-and-the-pacific---2011.html)

UNODC (2012), *World Drug Report 2012*, UNODC, Vienna (https://www.unodc.org/unodc/en/data-and-analysis/WDR-2012.html)

UNODC (2013), *Transnational Organized Crime in East Asia and the Pacific, UNODC, Vienna (https://www.unodc.org/documents/data-and-analysis/Studies/TOCTA_EAP_web.pdf)*.

UNODC (2014a), *Global Synthetic Drugs Assessment: Amphetamine-type stimulants and new psychoactive substances*, United Nations, doi:10.18356/19d5a8d1-en.

UNODC (2014b), *World Drug Report 2014*, UNODC, Vienna (https://www.unodc.org/documents/wdr2014/World_Drug_Report_2014_web.pdf).

UNODC (2015a), *Drug Money: the illicit proceeds of opiates trafficked on the Balkan route, UNODC, Vienna* (https://www.unodc.org/res/cld/bibliography/2015/drug_money_the_illicit_proceeds_of_opiates_trafficked_on_the_balkan_route_html/Drug_Money_the_illicit_proceeds_of_opiates_trafficked_on_the_Balkan_route.pdf).

UNODC (2015b), *World Drug Report 2015*, UNODC, Vienna (https://www.unodc.org/wdr2015/).

UNODC (2017a), *Booklet 4 World Drug Report: Market Analysis of Synthetic Drugs: Amphetamine-type stimulants, new psychoactive substances*, U*NODC, Vienna (https://doi.org/10.18356/5c554389-en*)

UNODC (2017b), *Global Synthetic Drugs Assessment: Amphetamine-type stimulants and new psychoactive substances*, UNODC, Vienna (https://www.unodc.org/documents/scientific/Global_Drugs_Assessment_2017.pdf) this DOI is not correct as it sends you to a report from2014

UNODC (2019), *World Drug Report 2019*, UNODC, Vienna (https://wdr.unodc.org/wdr2019/)

UNODC (2020), *World Drug Report 2020*, UNODC, Vienna (https://wdr.unodc.org/wdr2020/index.html)

USDoS (US Department of State) (2009), *International Narcotics Control Strategy Report: Volume 1 Drug and Chemical Control March 2009*, US Department of State (https://2009-2017.state.gov/j/inl/rls/nrcrpt/2009/vol1/index.htm).

Westcott, T. and Ismaeli, A. (2019), *Sanctions and Smuggling*, Global Initiative Against Transnational Organized Crime (https://globalinitiative.net/wp-content/uploads/2019/04/TGIATOC-Report-Sanctions-Iraq-Iran-05Apr1300-Web.pdf).

YJC (Young Journalists Club) (2020a, March 17), 'Discovery of 760 kg of meth and crack in a fuel tanker' (کشف ۷۶۰ کیلو شیشه و کراک در تانکر حمل سوخت), *YJC* (https://www.yjc.ir/fa/news/7286539/-کشف

.(۷۶۰-کیلو-شیشه-و-کراک-در-تانکر-حمل-سوخت

YJC (2020b, August 4), 'Dollars, coins, cars, meat and dairy become more expensive; Cheap methamphetamine / huge investment to destroy humans' (دلار، سکه، خودرو، گوشت و لبنیات گران می شوند؛ شیشه ارزان/ سرمایه گذاری هنگفت برای نابودی انسان), *YJC* (https://www.yjc.ir/fa/news/7446177/-دلار-سکه-خودرو-گوشت-و-لبنیات-گران-می-شوند-شیشه-ارزان-سرمایه-گذاری-هنگفت-برای-نابودی-انسان).

YJC (2020c, October 19), 'The increase in the number of addicts has increased simultaneously with the prevalence of corona/industrial drug production in Iran' (افزایش آمار معتادان همزمان با شیوع کرونا/ تولید مواد مخدر صنعتی در ایران افزایش یافته است), *YJC* (https://www.yjc.ir/00Vb3Z).

YJC (2020d, October 25), 'Discovery of meth, heroin, opium and cannabis in Taybad', *YJC* (https://www.yjc.ir/00Vcjl).

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Editorial group: Alexander Söderholm (lead author), Andrew Cunningham, Laurent Laniel, Paul Griffiths, Roumen Sedefov.

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EMCDDA, Praça Europa 1, Cais do Sodré, 1249-289 Lisbon, Portugal
Tel. (351) 211 21 02 00 | info@emcdda.europa.eu
emcdda.europa.eu | twitter.com/emcdda | facebook.com/emcdda